

ca

10

The sugar series of alcohols. P. VALENTIN. *Collection Czechoslov. Chem. Comm.*
3, 490-513 (1931).—According to Helferich and Becker (C. A. 19, 250), trityl chloride,
CICPh₃ (I), reacts only with a primary hydroxyl. In the present work on the purely alc.
substances of the sugar series, it was found that as many mols. of I react as there are
primary hydroxyls present. General method of prepn.: to the sugar alc in the least
quantity of dry pyridine is added the calcd. amt. of I and the product is pptd with H₂O
after 1-3 days. If the sugar alc. like dulcitol, is insol. in pyridine, the method does not
work. The yields are up to 90%. The trityl ethers crystallize well. The mono-ethers
are easily sol. in MeOH and EtOH, while the di-ethers are more sol. in C₆H₆. Me₂CO,
CHCl₃ and Et₂O. The ethers dissolve in concd. H₂SO₄ to a brown soln., which on pour-
ing into H₂O quantitatively ppts. Ph₃COH. They should prove valuable for synthetic
work. *Trityl-D-glucitol*, m. 133-5°, [α]_D 3.95°; *tritylfructitol*, m. 135-42°, [α]_D -5.0°;
trityl-D-galactitol, m. 132-5°, [α]_D -4.2°; *trityl-α-D-glucosylhexitol*, m. 103-4°, [α]_D
trityl-β-D-glucosylhexitol, m. 68-72°, [α]_D 1.82°; *tritylglutanol*, m. 141-5°; *tritylerythritol*, m.
-2.0°; *tritylmesoerythritol*, m. 182-4°; *tritylmannitol*, m. 98-103°, [α]_D 1.62°;
trityl-D-arabitol, m. 111-3°, [α]_D -3.5°; *tritylmannitol*, m. 98-103°, [α]_D 1.62°;
tritylsorbitol, m. 72-83°, [α]_D -7.8°; *trityl-α-D-glucosylheptitol*, m. 117-23°;
tritylerythritol, m. 350°.

ALFRED HOFFMAN

10

CO

Glucosylalkylamines. E. Votoček and F. Valentin.
Chem. Listy 54, 17-21 (1956); *Ch. C. A.* 30, 20277.

The sugar dissolved in a min. vol. of boiling water is cooled and then treated with an equiv. quantity of the liquid amine or of an aq. or MeOH soln. of the amine. The crystals which appear in a few min. or in a few days are dried on a porous plate and then recrystd. from water or MeOH. In this way xylose, arabinose, rhamnose, fucose, glucose, mannose and galactose condensed with the primary amines (MeNH₂, EtNH₂, PrNH₂, BuNH₂, AmNH₂, C₆H₅NH₂, and C₁₁H₂₃NH₂) according to the scheme:

$$-CH_2-CH(OH)- + H-NHR \rightarrow -CH_2-CH(NHR)- + H_2O$$

The products (called glucosylalkylamines) are simple homologs lying between the glucosylamines of Labay de Bruyn and van Leent and the glucosylarylamines as glucose anilide, etc. Mineral acids decompose the glucosylalkylamines easily and liberate the sugar. All of the glucosylalkylamine preps. reduce alk. Cu soln. in the cold and also NH₄-AgNO₃; the reduction is hastened by traces of KOH. The linkage between the constituents of the glucosylalkylamines is not very strong, for the amine becomes detached by the action of aromatic hydrazines. In this way PhNHNH₂ acts upon mannosylbutylamine to give the phenylhydrazone of mannose; an excess of PhNHNH₂ acetate acts upon glucosylmethylamine to give the phenylmannose of glucose, etc. F. M.

ASB. 11A METALLURGICAL LITERATURE CLASSIFICATION

123000 HEP ONE JAC

123000 HEP ONE JAC

123000 HEP ONE JAC

| 1ST AND 2ND LETTERS | | | | | | | | | | | | | | | | | | | | | | | | | |
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| PROCESSING AND REPORTING | | | | | | | | | | | | | 10 | | | | | | | | | | | | |
| <p><i>ca</i></p> <p>The rotatory power of certain sugar hydrazones with relation to the stereochemical structure of the α-carbon. R. VOTOKAR, P. VALANTIN AND O. LEMINGER. <i>Collection Czechoslov. Chem. Comm.</i> 3, 250-64 (1931). The authors prepd. hydrazones of various sugars with 1,1 benzylphenyl, <i>p</i> chlorobenzylphenyl and dibenzylhydrazines, resp. They conclude that the benzyl group of these hydrazones has such a marked effect on the rotation of the α-C atom that the configuration of the rest of the sugar mol. has no effect on the rotation of the hydrazone. Of the hydrazones studied only 2 have not been previously prepd.; the <i>benzylphenylhydrazones</i> of <i>d</i> arabinose, m. 173°, and of <i>α</i> l rhamnose, m. 183-84°. <i>p</i> Chlorobenzylphenylhydrazone, m. 11°, was prepd from <i>p</i> ClC₆H₄CH₂Cl and PhNHNH₂.</p> <p>JAMES WILKS</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASACSLA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

27

ca

The constituents of mullein (*Verbascum*)-seed oil. E. Votoček, F. Valentin and J. Bulíř. *Collection Czechoslov. Chem. Commun.* 8, 455-60 (1966) (in French). - Bohemian

mullein seed oil, n_D^{20} 1.46075, n_D^{25} 1.457, unsaponifiable matter, comprises principally glycerides of linoleic, oleic, palmitic and stearic acids, the last predominating. H. A. Beatty

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

BC

2-3

Sugar alcohols. F. VALZ (Coll. Czech. Chem. Comm., 1931, 3, 493-513). In agreement with Holde's rule (A., 1928, 1, 6) C₆H₁₂O₆ reacts to form ethers with all the primary alcohol groups in sugar alcohols but not with secondary alcohol groups, and thus are obtained the C₆H₁₁O₅ ethers of L-rhamnitol, m. p. 128-136°, [α]_D +2.95° in C₆H₁₂; fucitol, m. p. 128-143°, [α]_D -5.0° in C₆H₁₂; epirhamnitol, m. p. 68-72°, [α]_D -4.2° in C₆H₁₂; L-rhamnohexitol (alcohol, m. p. 128-136°; Me., m. p. 170-173°), m. p. 128-156°, [α]_D -2.0° in C₆H₁₂; Me-OH (3:1), (C₆H₁₁O₅)₂ ether of mannerythritol, m. p. 162-164°; edonitol, m. p. 141-145°; xylitol, m. p. 158-160°; L-arabitol, m. p. 111-115°, [α]_D -2.6° in C₆H₁₂; mannitol, m. p. 88-100°, [α]_D -3.8° in C₆H₁₂; sorbitol, m. p. 88° (softens at 75°), [α]_D -7.8° in C₆H₁₂; α-glucosylitol, m. p. 117-120°; glycol, m. p. 161° (cf. A., 1928, 1, 331; crystallographic data by Novák); and the (C₆H₁₁O₅)₂ ether of pantherythritol, m. p. above 350°. CH₃PH₂ or CH₃ derivatives of these ethers could not be obtained. J. W. BAKER.

154-514 METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

A-3

p-Phenyltolylpyrazoselenes. N. Vorobek and V. VALENTIN (Coll. Czech. Chem. Comm., 1933, 6, 84).
C₁₀H₇N₂Se, m.p. 120–141°C; gives p-phenyltolylhydrazine (A., 1932, 843); gives 1-p-phenyltolyl-2-methylpyrazoselenes, m.p. 120–141°C; (2-Ac. derivative, m.p. 100–105°), the oxime derivative, m.p. 120°, of which is reduced to 4-amino-1-p-phenyltolyl-2-methylpyrazoselenes (I), isolated as the ampicoline derivative, m.p. 100–105°. This with HCl gives the unstable diphenylchloride of (I). Action of air on (I) gives "amorphous acid," C₁₀H₇N₂O₂, m.p. 65–66°. 1-p-Phenyltolyl-2-methylpyrazoselenes, m.p. 170°, is similarly obtained. A. A. L.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 6TH ORDERS

7

BC

Common Elements

Common Valence

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ROOM SYMBOL

COLLECTOR

DATE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

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| PROCEDURES AND PROPERTIES INDEX | | 2-3 | |
|--|--|---|--|
| <p>[3:6]-Anhydrogalactose. F. VALENTIN (Coll. Chem. (Chem. Comm., 1232, 4, 364-376).—α-Methylgalactoside (modified prep.), when treated in $C_{12}H_{22}N$ with $ClPbCl$ and then with Ac_2O, gives 2:3:4-</p> | | <p>triacetyl-6-triphenylmethyl-α-methylgalactoside, m.p. 179-181°, $[\alpha]_D +56^\circ$ in C_6H_6, which, when treated with PHr, in ethylene dibromide and then with NH_3-MeOH, affords α-methylgalactosidyl 6-bromide, decomp. 163°, $[\alpha]_D +157^\circ$ in H_2O. This with $Be(OH)_2$ yields 3:6-anhydro-α-methylgalactoside, m.p. 141-143°, $[\alpha]_D +82.4^\circ$ in H_2O, hydrolyzed by 1% H_2SO_4 to 3:6-anhydrogalactose (I), amorphous, $[\alpha]_D$</p> | |
| <p>CH(OH)-CH(OH)-CH-CH(OH)-CH-CH₂ (I)</p> | | <p>in $H_2O +37.6^\circ$, changing to $+27.2^\circ$ (phenylglucosamine, m.p. 215° (decomp.), $[\alpha]_D +48.2^\circ$ in $MeOH$). The possibility that (I) contains an ethylenic linking is excluded by its stability to halogens, and the constitution of the 3:6-ring follows from stereochemical reasons and the formation of the osazone. (I) decolorizes Schiff's reagent in 3-4 sec. and is considered to be an anhydro-aldehyde. Mutarotation is due to opening of the 1:5-ring, and not the more stable 3:6-ring, and equilibrium is between (I) and the aldehyde. For stereochemical reasons the pyranose ring can re-form only in one direction. R. S. C.</p> | |
| <p>AL-51-A METALLURGICAL LITERATURE CLASSIFICATION</p> | | | |
| <p>12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989900</p> | | | |


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| 1ST AND 2ND CODES | | 3RD AND 4TH CODES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROCEDURE AND PROPERTIES INDEX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Hydrazone and osazones of sugars. E. VORONIN and P. VALENTIN (Ark. Khim., 1931, 8, 155-162).—The sugar of which a given hydrazone is a derivative can be identified by distilling the hydrazone with 12% HCl, when the production of furfuraldehyde indicates the presence of pentose; and of methylfurfuraldehyde methylpentose, whilst neither is evolved by hexoses. This reaction can be applied to determine whether the pentose or methylpentose component of a disaccharide is responsible for its reducing action. Lactosephenylosazone exhibits mutarotation in MeOH, whilst the rotation of the phenylosazone of anhyd. lactose is constant. p-Nitrobenzaldehyde can conveniently be substituted for PhCHO in the regeneration of sugars from their hydrazones, in view of the greater insolubility of its</p> <p>hydrazones. Fructosephenylmethylosazone yields the corresponding phenylosazone on heating with excess NHPh-NH_2, whilst with p-bromophenylmethylhydrazones a mixed osazone is obtained. The mutarotation of osazones is not due to tautomerism between the dihydrazones and azo forms, as fructosephenylmethylosazone, which does not possess a labile H atom, exhibits mutarotation.</p> <p>R. TRUSKIEWSKI.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>00</td> </tr> </table> | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | | | | |

Rotatory powers of some sugar-hydrazones in relation to the stereochemical structure of the α -carbon atom. E. VORUCHIK, F. VALENTIN, and O. LEXNER (Coll. Czech. Chem. Comm., 1957, 22, 250-264).—The rotations of the following phenyl-benzylhydrazones in MeOH are in agreement with the Hudson rule: *d*-arabinose, m. p. 172°; *L*-arabinose, *d*-xylose, *d*-lyxose, *L*-thamnos, *d*-mannose, *d*-glucose, *d*-fructose, *d*-sucrose, *d*-mannose, *L*-s-rhamnose, m. p. 183-184°, and *d*-s-galactose. On the other hand, ethyl-, butyl-, and di-phenylhydrazones of different sugars show no regularity in the rotations. Phenyl-*p*-chlorobenzyl-hydrazones, m. p. 44° (hydrochloride), affords the following hydrazones (the figures in parentheses are the final values of $[\alpha]_D$ in MeOH and are in agreement with the Hudson rule): *p*-chlorobenzaldehyde, m. p. 109°; COMe, m. p. 66°; furfuraldehyde, m. p. 101-102°; PhCHO , m. p. 99°; *L*-arabinose, m. p. 172° (-6.4°); *d*-arabinose (+3.6°); *d*-xylose, 0-10°; m. p. about 80° (-21.1°); *d*-lyxose, m. p. 134-135° (+29.2°); *d*-ribose, m. p. 144-145° (-2.4°); *L*-thamnos, m. p. 118-119°; *d*-fructose, m. p. 153° (+11.4°); *d*-glucose, m. p. 155-156° (-3.2°); *d*-mannose, m. p. 167-168° (+12.9°); *d*-sucrose, 0-5H₂O, m. p. 161° (-9.8°); *L*-s-rhamnose, m. p. 172° (+10.0°); and *d*-s-galactose, m. p. 156-159° (-13.6°). The rotations of the following di-phenylhydrazones in MeOH also agree with the rule: *L*-arabinose, m. p. 128° (-1.3°); *d*-arabinose, m. p. 138-139° (+1.0°); *d*-ribose, m. p. 101-102° (-15.2°); *d*-xylose, m. p. 130° (-8.6°); *d*-lyxose, m. p. 113-116° (+27.7°); *L*-thamnos, m. p. 151-152° (-10.5°); *d*-fructose, m. p. 162.5° (0°); *d*-mannose, m. p. 163-6° (0°); *d*-glucose, m. p. 99-101° (-1.07°); *d*-sucrose, m. p. 156-157° (+12.9°); *d*-galactose, m. p. 151-152° (-4.2°); *L*-s-rhamnose, m. p. 164° (+3.4°); and *d*-s-galactose, m. p. 146-148° (-15.6°). The conclusion is reached that the benzyl group enhances the rotation so that the configuration of the rest of the sugar chain has no influence on the sign of the rotation of the hydrazones. F. R. SNAW.

[illegible]

PROCESSING AND PROPERTIES INDEX

BC
A-3

***β*-Anhydromannono-γ-lactone.** Y. VALENTIN
(Ost. Czech. Chem. Comm., 1957, 9, 315-326).—
3:6-Anhydromannono treated with Br in H₂O for
several days gives non-cryst. *β*-anhydromannonic
acid (I) (amorphous *β*-salt), which yields a phenyl-
hydrazide, m.p. 180-5° (decomp.), [α]_D +10.7° in
MeOH. This with KOH-H₂O-PhCHO at the b.p.
gives the γ-lactone, m.p. 113°, [α]_D +120-5° in H₂O,
falling slowly to +115-3° after 248 hr. K₂ selenate
reacts violently with AcCl-H₂SO₄ giving α-
dioxycyclohexene-γγ'-dilactone, m.p. 190-192°, [α]_D
+155° in Ac₂O. It is concluded that the two rings of
these and of other sugar compounds containing the
dicyclic system  have the same optical
character, [α] then being augmented, and that the
effect increases with the no. of CO groups.

E. W. W.

ASD U.S.A. ORGANOGRAPHIC LITERATURE CLASSIFICATION

[illegible]

A-3

Benzaldehyde, anhydromannose. F. VALEN-
TIN (Coll. Czech. Chem. Comm., 1934, 8, 364—370). —
c-Methylenmannoside (improved prep.) with $\text{C}_6\text{H}_5\text{Cl}$ in
dry $\text{C}_6\text{H}_5\text{N}$ and subsequent addition of Ag_2O affords
6-triphenylmethyl-*c*-methylenmannoside 2:3:6-triacetate,
m.p. 131–132°, ($d_4^{20} + 80^\circ$) in CH_2Cl_2 , converted by
 PIAc in CH_2Cl_2 into the corresponding 6-*is*-derivative,
m.p. 78–81°, ($d_4^{20} + 87^\circ$) in MeOH , deacetylated by
 $\text{NH}_3\text{-MeOH}$ on *cinnamylmannoside* 6-*diacetate*, m.p.
97–98°, ($d_4^{20} + 82^\circ$), converted by boiling liq. Na(OH)
into 3:6-anhydro-*c*-methylenmannoside (I), m.p.
130–132°, ($d_4^{20} + 84^\circ$) in H_2O (cryst. anal. optical
data). Hydrolysis of (I) with boiling 6% H_2SO_4
effects conversion into the stable bicyclic system of
the furanose form to give 3:6-anhydromannofuran.

A-3

BC

2-(5'-Anhydro-2-methyl-2-penten-3-one) F. VALENTIN (Coll.
Czech., Chem. Zvesti, 1950, 8, 24-25). — a Methyl-
magnesium chloride 6.7 times excess from NH₄Ac by
HNO₃ with H₂O₂ gives α-methyl-γ-anhydro-
anhydromethyl ketone, stable to H₂O; hydrolyzed by 2%
NaOH solution, stable to H₂O; hydrolyzed by 2%
HCl to γ-anhydro-2-methylpentan-3-one (I), which with
24% NaOH & slightly alkaline solution gives α-
anhydro-2-methylpentan-3-one (II), m.p. 145° (lit. 136°),
[α]_D -20.7° in H₂O (phenylhydrazone derivative, m.p.
125-126°, [α]_D -20.5° in CHCl₃), which with Br
reverts to (I). CHFR₃ is determined by distillation
with 60% H₂SO₄ in CO₂ and determination of the
PhCHO in the distillate as phenylhydrazones.

R. S. C.

| COMMON ELEMENTS | | COMMON VARIABLES MOI | |
|---|---|----------------------|---------------------|
| <p>CX</p> | <p style="text-align: right;">10</p> <p>Anhydromannose, a new sugar anhydride. F. Valentin. <i>Collection Czechoslov. Chem. Communications</i> 6, 354-70(1934).—Mannose, treated with MeOH and HCl, gave α-Me mannopyranoside (I) in 75% yield. By treatment of I in C₆H₅N with Ph₃CCl and acetylation, <i>O</i>-triisopropylidene-α-methylmannoside (II), C₂₁H₃₈O₇, was obtained, m. 131-2° (from MeOH or EtOH and ligroin); [α]_D 68.0°; yield 80%. Treated with PBr₃ in CCl₄, II gave the corresponding <i>O</i>-Br deriv. (III), C₂₁H₃₇O₇Br, m. 78-81° (from C₆H₅ and ligroin); [α]_D 57.5°; yield 45%. By action of NH₃ in MeOH, III was transformed into the <i>O</i>-bromo-α-methylmannoside, m. 97-99°, [α]_D 52°; analysis showed this material to be slightly impure. By treatment with Ba(OH)₂, <i>O</i>-hydro-α-methylmannopyranoside (IV), C₁₁H₂₀O₆, was obtained, m. 130-2° (from EtOAc); [α]_D 97.1°. Crystals of IV showed a:b:c = 0.934:1:1.057. The 3 m by Becke's method were: α_D 1.521, β_D 1.522, γ_D 1.526. Hydrolyzed with H₂SO₄, IV gave a syrup which crystd., m. 102-3°, [α]_D 95.92°. This was <i>O</i>-anhydromannose (mannofuranoside) (V). It showed no mutarotation and required 10-15 min. to develop color with fuchsin reagent. It formed a benzylphenylxylarane, C₂₁H₂₆O₄N₂, m. 144-5° (from C₆H₅); [α]_D 43.59°; a phenylhydrasone insol. in H₂O; and an osazone, C₁₂H₁₂O₄N₄, m. 188-90° (40% alc.); [α]_D -110.14°. V, treated with HCl in dry MeOH, gave a syrup which became crystd., C₁₁H₁₆O₆, m. 85° (from AcOEt and ligroin); [α]_D 157°; this was <i>O</i>-anhydromannofuranoside. V's reactions for believing the structures assigned are correct are given in detail. M. P. Benoy</p> | | |
| ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION | | | |
| SDNN STYRIAN SDNDO * A | SDNDO NIP ONV DSE | SDNNOIC | SDNNOIC ONV ONV ASB |

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CA

Chemistry of sugar hydrazones and osazones. R. VOTOČEK AND F. VALENTIN. *Arch. Hem. Farm.* 5, 135 51(181-2 French)(1931). -The sugar components can be recognized by boiling the hydrazones with 12% HCl, the hydrazones of a pentose methylpentose yield furfural or methylfurfural and hexose yields neither. The test can be effected microchemically with a few cc. of the sugar hydrazone. In osazone derivs. of disaccharides it can be seen whether a pentose or methylpentose component does or does not constitute the reducing part of the sugar mol. V. and V. measured the rotatory power of the phenylosazone of lactose and its anhydride in MeOH. The first diminishes with time, the second (often higher on account of the anhydride ring) remains const. Due to the smaller soly. of its hydrazone, β -D-NC₆H₅ renders possible an integral solution even where it is incomplete with Ball as in the case of rhodose methylphenylhydrazone. The hydrazine radicals can be replaced by other hydrazone residues, not only in hydrazones, but also often in osazones with the formation of a new osazone either simple or mixed. Thus, fructose methylphenylosazone, treated in the cold with an excess of PhNHNH₂.AcOH, gives the corresponding phenylosazone, e. g., the β -bromophenylhydrazone would furnish the mixed osazone, HOCH₂(CH(OH))₄C(:NNMePh)CH:NNHC₆H₄Br. The theory of Zerner and Waltuch, according to which the inconstancy of rotatory power of osazones is due to the tautomeric change of a dihydrazone form into an azoic form, cannot be maintained, since fructose methylphenylosazone, which does not possess any H susceptible of migration, shows also the phenomenon of mutarotation. J. KŘÍŽAN

ASB-5LA DETALLURGICAL LITERATURE CLASSIFICATION

10

ca

A new anhydrogalactose. E. VALLEMIAN. *Collection Carbohydr. Chem. Communica-*
tions 4, 364-75 (1962). 3,6-anhydrogalactose (I) has been prepd. and differs from those
 known in the stability of its anhydride ring which even decreases the stability of the
 original galactose ring. V. compares I to Fischer's 3,6-anhydroglucose (C. A. 6, 1295).
 On the basis of reducing power, osazone formation, the original pyran ring in galactose.
 and stereochem. reasons V. assigns to the anhydride ring the 3,6-positions. He notes
 that models show this configuration to be the only one which would weaken the pyran
 ring of galactose. He concludes that the ring is thus weakened since I reacts with Schiff's
 reagent and also shows a change of rotation. A stable 2-ring system should not show
 mutarotation (Fischer's 3,6-anhydroglucose does not) and V. believes that the new
 rotation is due to an equil. mixt. of bicyclic and aldehydic forms of I. V. also cites
 reasons to show that the pyran ring did not change to a furan ring. Anhyd. α -methyl
 galactoside in dry pyridine was treated with $\text{Pb}(\text{CCl}_3)_2$ then with Ac_2O , giving 78% 2,3,4-
 triacetyl 6-trifluoro- α -methylgalactoside (II), m. 170-81°, $[\alpha]_D^{25} +6^\circ$. By treating II with
 $\text{Pb}(\text{CH}_3\text{COO})_2$ he obtained 70% of the bromohydrin (III), brown and decmp. 187-
 188°, $[\alpha]_D^{25} +10^\circ$. After refluxing a mixt. of III and $\text{Ba}(\text{OH})_2$ for 2 hrs., 3,6-anhydro- α -
 methylgalactoside (IV) was isolated in almost theoretical yield, recrystd. from AcOH , m.
 141-2°, $[\alpha]_D^{25} +2.4^\circ$ (in H_2O). Hydrolysis of IV with 1% H_2SO_4 gave I which has
 been obtained only in the amorphous state. A water soln. of I was examd. in the
 polarimeter and the rate of change of rotation was found to follow the equation for a
 monomol. reaction. Extrapolation of the curve to zero time gave $[\alpha]_D^{25} +38.6^\circ$. The
 osazone m. 215°, $[\alpha]_D^{25} +48.2^\circ$ (MeOH).
 ANN R. WHITE

ASS. 55 A METALLURGICAL LITERATURE CLASSIFICATION

| GROUP | CLASS | SUBCLASS | SECTION | DATE | BY | REMARKS |
|-------|-------|----------|---------|------|-----|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 32 | 33 | 34 | 35 |
| 36 | 37 | 38 | 39 | 40 | 41 | 42 |
| 43 | 44 | 45 | 46 | 47 | 48 | 49 |
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| 57 | 58 | 59 | 60 | 61 | 62 | 63 |
| 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 |
| 78 | 79 | 80 | 81 | 82 | 83 | 84 |
| 85 | 86 | 87 | 88 | 89 | 90 | 91 |
| 92 | 93 | 94 | 95 | 96 | 97 | 98 |
| 99 | 100 | 101 | 102 | 103 | 104 | 105 |

ca

The glucosylalkylamines (and other aldose alkylamines). E. Votoček and F. Valentin. *Collection Czechoslov. Chem. Communications* 6, 77-90(1934).—These compds. are formed by the condensation of the aldoses with 1 mol. of the primary amine. They crystallize either in the anhyd. condition, with 1 or 0.5 mol. of H₂O or MeOH depending upon the solvent used. They show mutarotation and must therefore have the lactolic structure. The substituted hydrazines react with the alkylamines to give the hydrazone of the sugar and the corresponding amine. The following alkyl derivs. were sugar in an aq. or MeOH soln. of the amine. The alkyl-amine deriv. crystallizes on standing. *Methylamines*: rabinosyl, C₁₁H₁₉O₅N.2H₂O, m. 101°; fucosyl, C₁₁H₁₉O₅N. MeOH, m. 125°; rhamnosyl, C₁₁H₁₉O₅N. MeOH, m. 78-80° (decomp. 126-7°); glucosyl, C₁₁H₁₉O₅N.H₂O, m. 78-80° (decomp. 115°). *Rhamnosylethylamine*, C₁₁H₁₉O₅N.0.5H₂O, m.

141-2°. *Propylamines*: rhamnosyl, C₁₁H₁₉O₅N, m. 145°; fucosyl, C₁₁H₁₉O₅N, m. 124-5°; galactosyl, C₁₁H₁₉O₅N, m. 127-8°. *Butylamines*: xylosyl, C₁₁H₁₉O₅N.H₂O, m. 81-2°; rhamnosyl, C₁₁H₁₉O₅N.MeOH, m. 136-7°; fucosyl, C₁₁H₁₉O₅N.0.5H₂O, m. 88-9°; glucosyl, C₁₁H₁₉O₅N.H₂O, m. 97-8°; galactosyl, C₁₁H₁₉O₅N, m. 82-3°; mannosyl, C₁₁H₁₉O₅N.H₂O, m. 71-2°. *Amylamines*: rhamnosyl, C₁₁H₁₉O₅N.H₂O, m. 139-40°; fucosyl, C₁₁H₁₉O₅N.H₂O, m. 96-7°; galactosyl, C₁₁H₁₉O₅N.H₂O, m. 110°; mannosyl, C₁₁H₁₉O₅N.0.5H₂O, m. 70-1°. *Hexylamines*: xylosyl, C₁₁H₁₉O₅N.H₂O, m. 87°; rhamnosyl, C₁₁H₁₉O₅N, m. 132-3°; fucosyl, C₁₁H₁₉O₅N, m. 100-10°; glucosyl, C₁₁H₁₉O₅N.H₂O, m. 70-80°; mannosyl, C₁₁H₁₉O₅N.0.5H₂O, m. 75°. *Heptylamine*: rhamnosyl, C₁₁H₁₉O₅N, m. 138°; fucosyl, C₁₁H₁₉O₅N.0.5H₂O, m. 84-5°; glucosyl, C₁₁H₁₉O₅N.H₂O, m. 97°; galactosyl, C₁₁H₁₉O₅N, m. 100°, softens 101°.

W. A. Moore

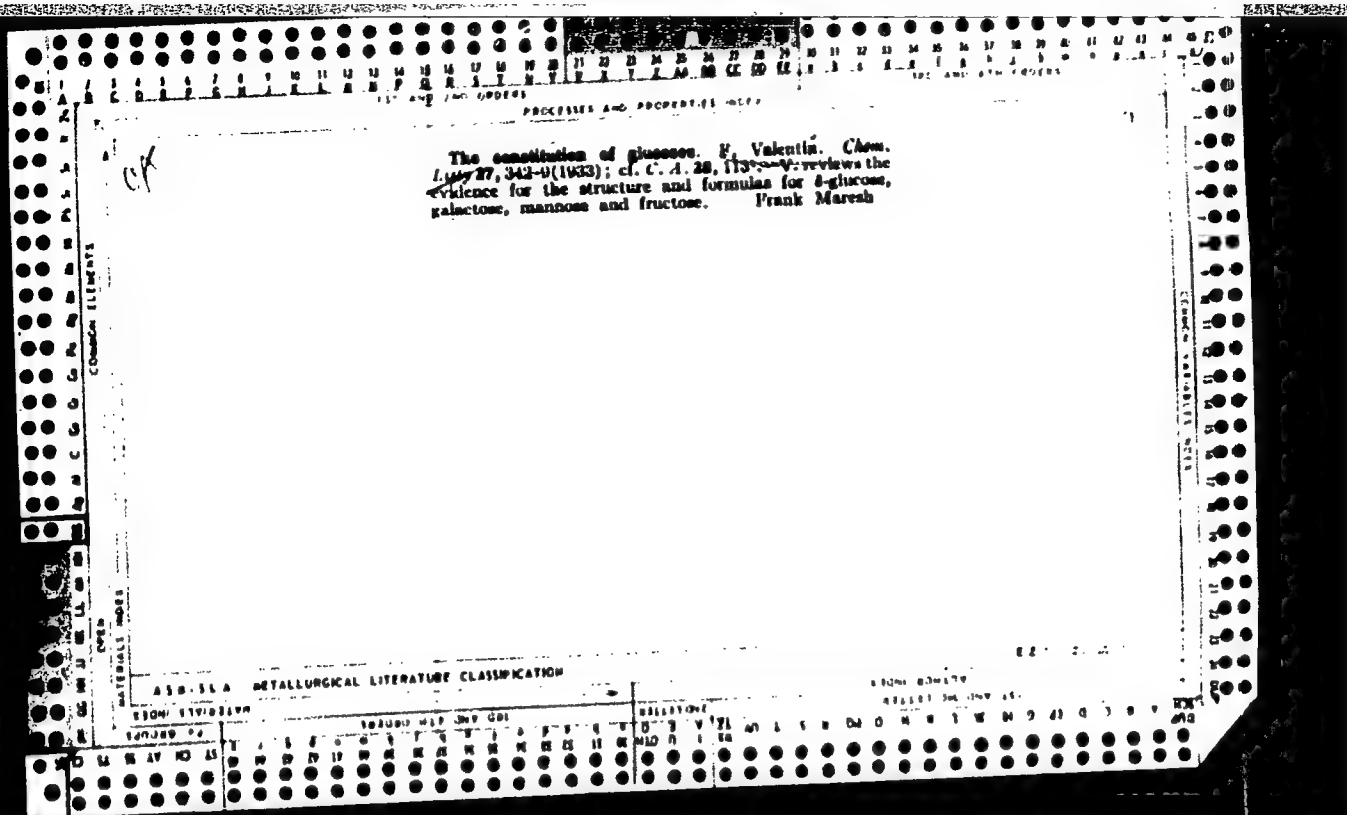
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10A

The constitution of glucose. F. Valentin. *Chem. Listy* 27, 276-8, 301-3, 319-25(1933).—The constitution of sugars as polyhydrony aldehydes, butylene oxides and amylen oxides is reviewed. The stable and unstable forms or their derivatives are discussed in connection with the semiacetal ring.

Frank Marresh

ASD-55A METALLURGICAL LITERATURE CLASSIFICATION



| 1ST AND 2ND CRITERIA | | | | | | | | | | PROCESSES AND PROPERTIES INDEX | | | | | | | | | |
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| <p>10</p> <p>ca</p> <p>The constitution of glucose. F. Valentin, <i>Chem. Listy</i> 27, 275-8, 301-3, 319-25(1933).—The constitution of sugars as polyhydroxy aldehydes, butylene oxides and amylose oxides is reviewed. The stable and unstable forms of their deriva. are discussed in connection with the semiacetal ring.</p> <p>Frank Marsh</p> | | | | | | | | | | | | | | | | | | | |
| <p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | |
| 1ST AND 2ND CRITERIA | | | | | | | | | | PROCESSES AND PROPERTIES INDEX | | | | | | | | | |
| 1ST AND 2ND CRITERIA | | | | | | | | | | PROCESSES AND PROPERTIES INDEX | | | | | | | | | |

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

OPEN

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

8-2

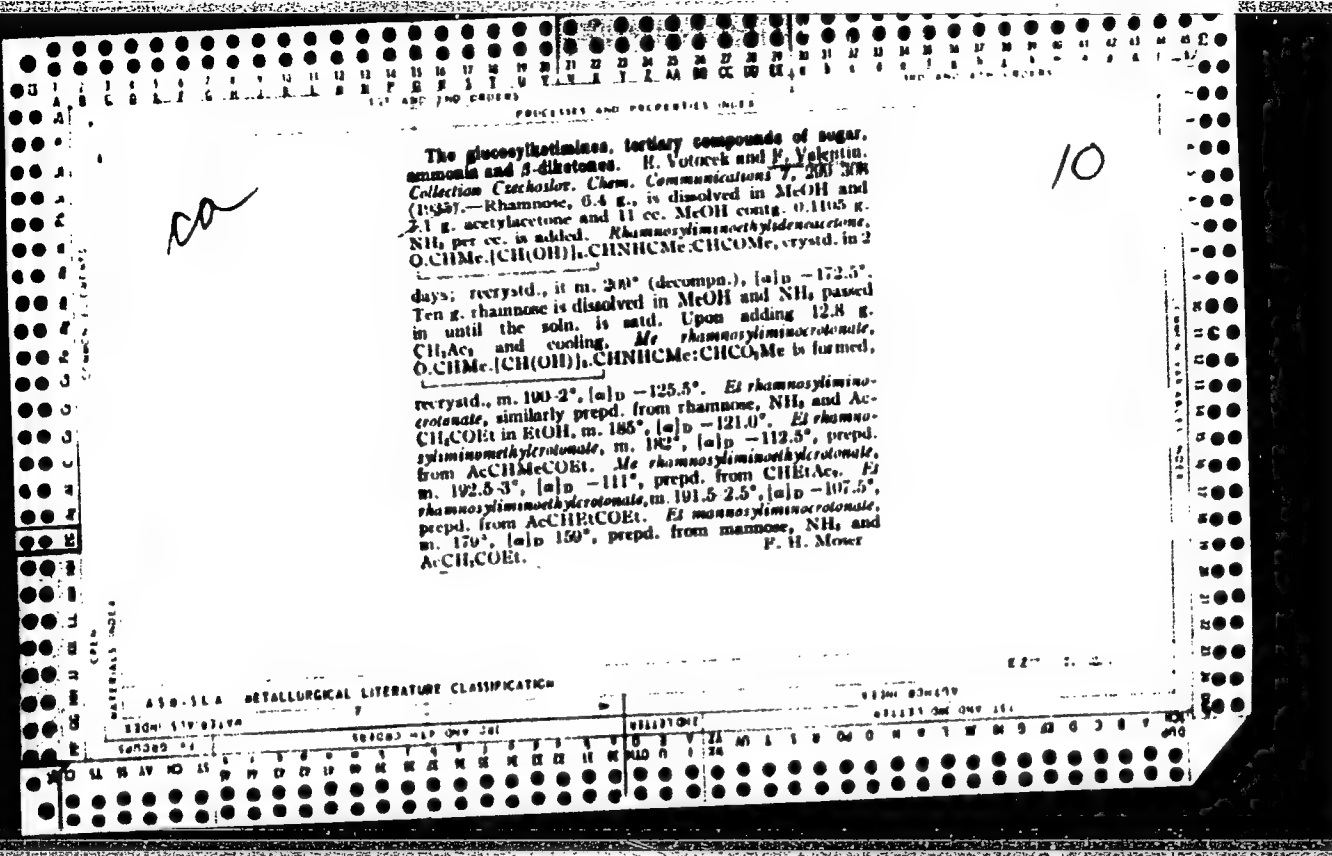
SYNTHESIS OF PHENETHYLPYRAZOLONES. E. VOJNICK AND E. VALENTIN. *Collection Czechoslov. Chem. Communications* 3, 84-90(1938). Phenethylhydrazine reacts like PhNHNH₂ with AcCH₃CO₂Ht and its homologs 1-Phenethyl-3-methyl-5-pyrazolone, m. 134-41.5°; 4-isoxanoso deriv., m. 120°. On reduction with Zn and AcOH and subsequent action of BzH this gives benzal-1-phenethyl-3-methyl-4-amino-5-pyrazolone, m. 108-8°, which with 8% HCl gives 1-phenethyl-3-methyl-4-amino-5-pyrazolone-2-HCl. With alkalis the latter gives, in place of the free base, a red oxidized substance, homorubazonic acid, C₁₄H₁₆O₄N₂, m. 95-6°. This also seps. from the mother liquors of the benzal deriv. 1-Phenethyl-2,3-dimethyl-5-pyrazolone, m. 102-3°. A. HOFFMAN

[illegible]

Phytochemical notes. I. The glucides from the gum of *Vicia vulgaris* (*Lycnia Viscaria* L.). E. VOJČEK AND F. VALENTIN. Collection Czechoslov. Chem. Communications 4, 882-4(1962).—The principal part of the gum of *Viscaria vulgaris* consists of a polyose or polysaccharide with a base of d-glucose and d-xylose. R. C. R.

| 1ST AND 2ND CATEGORIES | | | | | | | | | | 3RD AND 4TH CATEGORIES | | | | | | | | | |
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| PROCESSES AND PROPERTIES INDEX | | | | | | | | | | | | | | | | | | | |
| <p><i>Be</i></p> <p>Physicochemistry. I. Structure of the gum of <i>Platanus vulgaris</i> (Liquidambar styraciflua, L.). E. Vercoren and E. Vanoverbeke. (Natl. Acad. Chem. Comm., 1958, 4, 583-584).—Hydrolysis of the gum [obtained by extraction of the glutinous portions of the chips with boiling H₂O, evaporation of the aq. extract, clarification with Fe(OAc)₃, removal of Fe with H₂S, further evaporation to a syrup, and spin. with EtOH] with 1% H₂SO₄ at 100° (bath) gives glucose and D-xylose. H. H.</p> | | | | | | | | | | | | | | | | | | | |
| <p>ASB-SEA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>SECTION DIVISION</p> <p>SECTION - 10 ONE ONE</p> <p>SECTION - 10 ONE ONE</p> <p>SECTION - 10 ONE ONE</p> | | | | | | | | | | | | | | | | | | | |

The condensation of mercaptans with 5-ketomethylpentonic acids. E. Votawek and F. Valentin. *Collection Czechoslov. Chem. Communications* 7, 44 (1955).—When 1 mol. of $\text{MeCOCH(OH)CH}_2\text{CO}_2\text{H}$ in aq. HCl , RSH is added and the soln. cooled, crystalline compounds are obtained to which has been assigned the structure $\text{CH}_3\text{C}(\text{CO}_2\text{H})\text{CH}_2\text{SR}$. CMe_2CNR . When R is Et the compound is 71–2°, Me , m 140–1°, Pr , m 108–9°, Bu , m 68–9°. W. A. Mieser



CH

10

Acetone derivatives of xylitol and their constitution.
Frantiek Valentin and Dezider Tomkuljak (Slovak Tech.
Univ., Bratislava, Czech.). *Chem. Zvesti* 3, 146-64 (1949).
—Diacetonexylitol was prepd. and its constitution detd.
On treatment with Me_2CO and concd. H_2SO_4 , xylitol (1)
binds first 1 mol. of Me_2CO in a 6-membered heterocycle
at positions 3 and 5 of the I mol., forming the amorphous
monaacetonexylitol, b_p 145-7°, n_D^{20} 1.4778. Prolonging
the reaction time and increasing the amt. of the condensa-
tion agent gives diacetonexylitol, in which the 2nd mol. of
 Me_2C is bound at positions 1 and 2 of the sugar mol.,
forming a 5-membered heterocycle; the amorphous 1,2-
3,5-diacetonexylitol b_p 99-101°, n_D^{20} 1.4534. The follow-
ing derivs. of I were prepd. by oxidation with $\text{Pb}(\text{OAc})_2$:
1,2,3,5-diacetone-4-tolylsulfonyl, cryst., m. 71-3°; 3,5-
acetone-1,2,4-tribenzoyl, cryst., m. 103-4°; 3,5-acetone-
1,2,4-trimethyl, amorphous, b_p 69-71°, n_D^{20} 1.4324;
1,2,4-trimethyl, amorphous, b_p 97-9°, n_D^{20} 1.4610;
1,2,3,5-diacetone-4-methyl, amorphous, b_p 78-80°,
 n_D^{20} 1.4393; 3,5-acetone-4-methyl, amorphous, b_p 109-
11°, n_D^{20} 1.4603; 4-methyl, amorphous, b_p 167-9°; 1,2-
3,5-tetrabenzoyl-4-methyl, cryst., m. 121-3°.

Jan Micka

CA

Vitamin C in fresh and canned vegetables. František
Valentín and Danica Žuffová (Research Inst. Food Ind.,
Bratislava, Czech.). *Chem. Zvesti* 4, 309-12(1960).—
Twenty-one various kinds of vegetables in Bratislava region
was tested by Tilkman's method for vitamin C content when
fresh and canned vitamin C was very much lower in the
canned vegetables. Jan Micks

CA

Vitamin C in various fruits. Frantíček, Valentin and
Danica Žuflová (Food Research Inst., Bratislava, Czech.).
Chem. Zvesti 4, 8 13(1950).-- Twenty varieties of fruit
from the Bratislava region were tested for their vitamin C
by the Tillmans method and compared with the finished
product. Jan Muka

Quantitative separation of magnesium cation from sodium and potassium cations. František Vokřítek and Magda Suchánková-Tofflerová (Bratislava, Czech). *Chem. J. Czech S.* 104 (1950). The salts of Na^+ , K^+ , and Mg^{++} is evaporated to dryness with H_2SO_4 and ignited. After the sulfates are dissolved, freshly precipitated AgOH or Ag_2O with H_2O is added. $\text{Mg}(\text{OH})_2$ is adsorbed on the dispersed particles of AgOH . Jan Muck

CA

12

Vitamin C content of tomatoes. Frantíček Václav,
and Danica Zuffová (Food Research Inst., Bratislava,
Czech.). *Chem. Zvesti* 3, 340-53(1949).—The effect of
vegetation period and climatic conditions on vitamin C in
tomatoes was studied. There were losses of 61.4-85.2%
in the finished product (catsup) as compared with the
original tomatoes contg. 15.0-38.90 mg.% of vitamin C
as detd. by Tillmans method. Jan Muka

Valentin, F.

Vitamins in food research in Slovakia. F. Valentin, D. Žuffová, P. Hanula, M. Čunderliková, and I. Stein (Výsk. ústav potravinárského priemyslu, Bratislava, Czech.). *Průmysl Potravin* 4, 20-4 (1953).—In 72 different kinds of vegetables, fruits, oils, fats, and food products the contents of the following vitamins (I) were detd.: A, B₁, B₂, E, niacin, and folic acid. More than 450 tabulated values from approx. 5000 estns. are presented. Preventive measures against losses of I in manufg. processes are suggested.
L. J. Ucháč

VALENTIN, F.

ry

CZECH

Vitamins A (xerophthal) and carotenes in raw materials of
Slovakian food industry. F. Valentín, D. Žaňková, and M.
Čunderlíková (Výzkumný ústav potravinářského průmyslu, Bratislava, Czech.). Chem. Zvesti 8, 267-71 (1954); cf. C.A.
49, 525s.—Structural formulas and occurrence of β -carotene
in Slovakian fruits and vegetables are discussed. J. M.

VALENTIN, F.

"Vitamin A (axerophthol) and carotenes in basic raw materials of the Slovak food industry."
Chemicke Zvesti, Bratislava, Vol. 8, No. 5, May 1954, p. 167.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

VALENTIN, F.

"Chemistry of Penicillin as an Antibiotic of Today", P. 218, (TECHNICKA
PTACA, Vol. 6, No. 4, April 1954, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4,
No. 1, Jan. 1955, Uncl.

VALENTIN, FRANT

Czechoslovakia/Chemical Technology. Chemical Products and Their Application --
Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6769

Author: Valentin, Frant

Institution: None

Title: Capsaicin -- The Substance that Imparts the Burning Taste to Red
Pepper

Original
Publication: Prumysl potravln, 1955, 6, No 8, 383-387

Abstract: Data concerning the structure of capsaicin, its occurrence in nature,
its physiological and pharmacological action and methods for its de-
termination. Bibliography, 8 references.

Card 1/1

VALENTIN, F.

Coloring matter of paprika. p. 638. CHEMICKE ZVESTI. Bratislava.
Vol. 9, no. 10, Dec. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956.

VALENTIN, F. ; HANULA, P; ARSAL, J.

Effect of raw materials on the biological quality of corn extracts. P. 4.
CHEMICKÉ ZVESTI. (Slovenska akademia vied a Spolok chemikov na Slovensku)
Bratislava. Vol 10, no. 1, January 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress
Vol. 5, no. 12, December 1956.

VALENTIN, N.

The circulation speed of current assets in industrial enterprises. p. 70.

METALURGIA SI CONSTRUCTIA DE MASINI

Vol. 8, no. 3, Mar. 1956

Rumania

Source: EAST EUROPEAN LISTS Vol. 5, no. 10 Oct. 1956

BERATIS, A.; VALENKIN, A.

Investigating the increase in the use of heat-insulating roof-peat boards. B no.2:253-264 '62.

1. Institut stroitel'stva i arkhitektury M. M. 111111

VALENTINCIC, Joze, ing. (Beograd, Mladena Stojanovica 4)

Housing construction in the Scandinavian countries and in Yugoslavia.
(To be contd.) Tehnika Jug 17 no.1:28-31 Ja '62.

(Scandinavia—Housing)
(Yugoslavia— Housing)

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Construction of housing in the Scandinavian countries and in
Yugoslavia. Tehnika Jug 17 no.2:245-253 F '62.

1. Deputy Secretary for Industry of the Federal Executive Council,
Beograd.

(Scandinavia--Housing)
(Yugoslavia--Housing)

VALENTINCIC, M.

Intestinal parasites in Slovenia. Zdrav. vest., Ljubljana 23 no.
11-12:312-316 1954.

1. Mikrobioloski institut medicinske visoke sole v Ljubljani-
predstojnik prof. dr. Milica Valentincic.

(PARASITES,
intestinal, in Slovenia, in child., determ. technic (Slov))

VALENTINCIC, M.; STROPHNIK, Z.

Hystoplasma capsulatum. Zdrav. vest., Ljubljana 24 no.7-8:273-277
1955.

1. Mikrobioloski institut medicinske fakultete v Ljubljani-
predstojnik prof. dr. Milica Valentincic.

(HISTOPLASMA

capsulatum (S1))

(HISTOPLASMOSIS, diag.

(S1))

VALENTINCIC, M.; LEBEZ, D.; VOZELJ, M.

Jakobstahl complement fixation test with cardiolipin antigen.
Acta med. iugosl. 10 no.1:50-58 1956.

1. Department of Serology, Institute of Microbiology, Medical
Faculty, University of Ljubljana.

(COMPLEMENT

fixation with cardiolipin antigen in diag. of syphilis,
Jacobsthal technic.)

(CARDIOLIPIN

antigen complement fixation in diag. of syphilis,
Jacobsthal technic)

(SYPHILIS, diag.

complement fixation test with cardiolipin antigen,
Jacobsthal technic)

(ANTIGENS

cardiolipin antigen complement fixation in diag. of syphilis,
Jacobsthal technic)

VALENTINCO, M.

CZECHOSLOVAKIA / Zooparasitology. Parasitic Protozoa. G-2

Abs Jour: Ref Zhur-Biol., No 20, 1958, 91046

Author : ~~Valentino, M.~~, Kozak, M.

Inst : Not given

Title : The Dysentery Ameba and Environmental Temperature

Orig Pub: Zdravstv. vestn., 1957, 26, No 26, No 11, 456-457 (Slovenian)

Abstract: No abstract

Card 1/1

EXCERPTA MEDICA Sec 12 Vol 13/6 Ophthalmology June, 59...

969. PYRAZOLIDINE TREATMENT OF ENDOGENIC IRIDOCYCLITIS (Russian text) - Valentinene A. B. - VESTN. OFTALM., 1958, 7⁴ (31-36)
Pyrzolidine, an analogue of butazolidine (pyrazolon derivative), was the drug used by the author in treatment of 50 patients with endogenic iridocyclitis of various aetiology. It is most effective in relieving pain and decreasing inflammation. Acute clinical forms with increased exudation are especially susceptible to treatment by pyrazolidine. Investigation of the permeability of the blood vessels of the anterior portion of the eye in 15 patients demonstrated that this drug promotes normalization of vessel permeability. However, this takes place only after the disappearance of inflammation. Oral administration of the drug in the dose of 0.15 g. t.i.d. gives the greatest effect on the 5th-6th day. However, it is recommended that the treatment be continued up to the 7th-8th day for prophylaxis of early recurrences. At the same time the main endogenic cause of iridocyclitis should be treated. Gastro-duodenal ulcers, diseases of the haemopoietic organs, liver and kidney, insufficiency of the cardiac valves and pronounced arteriosclerosis are contraindications to the use of this drug. There were no complications when the drug was used in the above doses. Pyrazolidine may be employed in out-patient departments, with control of blood and urine data.

VALENTINENE, A. B., Cand Med Sci -- (diss) "Pyrazolidine in the treatment of of iridocyclitis." Moscow, 1960. 16 pp; (Second State Moscow Medical Inst im N. I. Pirogov); 250 copies; free; (KL, 51-60, 120)

VELKEY, Laszlo, dr.; TOTH, Anna, dr.; VALENTINI, Jozsef, dr.

Methemoglobinemia in infants caused by drinking water. Orv.
hetil. 105 no.5:201-203 2F '64.

1. Borsod megyei Semmelweis Korhaz, I. Gyermekosztaly.

*

NAZAROV, M.I.; PATRUSHEV, M.F., inz., retsenzent; LEGOSTAYEV, A.M., retsenzent;
TAIMAZA, V.F., retsenzent; VALENTINI, L.A., kand.tekhn.nauk, retsenz-
zent; KABAKOV, M.M., red.; ANOKHINA, M.G., tekhn.red.

[Paved canals] Moshchenye kanaly. Frunze, Akad.nauk Kirgizskoi
SSR, 1958. 104 p. (MIRA 12:3)
(Irrigation canals and flumes)

VALENTINI, L.A., kand.tekhn.nauk; TYAN, V.K., inzh.

Investigating the regimen of bed load flow in small
mountain rivers. Trudy SANIIRI no.95:3-15 '58.

(MIRA 13:6)

(Sukuluk River--Hydraulics)

VALENTINI, L.A., kand.tekhn.nauk

Construction of earth dams by depositing earth into water.

Trudy SANKHRI no. 98:101-104 '59.

(MIRA 14:1)

(Dams) (Hydraulic engineering)

VALENTINI, L.A., kand.tekhn.nauk

Headworks on mountain and piedmont sections of small rivers.
Trudy SNIIRI no. 104:3-14 '59. (MIRA 14:1)
(Hydraulic engineering)

VALENTINI, I.A., kand. tekhn. nauk; DERLYATKA, T.I., inzh.; NAUMENKO, Yu.G.
inzh.; SHISHORINA, G.I., inzh.

Destruction of the Kugart Dam and its analysis. Gidr. i mel. 13
no.9:54-61 S '61. (MIRA 14:9)

(Kugart River--Dams)

ARG024060

(N)

SOURCE CODE: UR/0124/66/000/004/B071/B071

AUTHOR: Valentini, L. A.; Derlyatka, T. I.

TITLE: Theory of an oblique hydraulic jump and its practical application

SOURCE: Ref. zh. Mekhanika, Abs. 4B486

REF SOURCE: Sb. Vopr. gidrotekhniki. Vyp. 23, Tashkent, Nauka, 1965, 12-18

TOPIC TAGS: hydraulics, fluid flow, flow analysis

ABSTRACT: The authors examine the problem of conjugate depths and magnitude of the angle β between the direction of the front of a jump and the direction of a turbulent flow in an oblique hydraulic jump arising at the vertical break of the sides of the channel. The equation of the law of conservation of mass and the equation of the theorem of impulses in projections onto the normal to the front of the jump and onto the direction of the front of the jump itself are used. This makes it possible to obtain equations determining the conjugate depths and angle β . Results are shown that the angle β can be found by calculating the propagation velocity of the disturbing wave in a flow of finite depth. Graphic relations for the above-indicated jump parameters are constructed. It is pointed out that the vertical break of the sides of the channel leads to a change in the conditions of the bottom streams of the flow which begin to move in the direction of the jump front. This can be used for reducing the silt saturation of the flow by constructing a special opening for

Card 1/2

ACC NR: AR6024060

discharging the silt. Abstractor's comment. The results obtained by the authors correspond to one case of an oblique jump which is realized provided the front of the jump passes through the site of the break of the channel sides and provided the lengths of the channel sections parallel to the front of the oblique jump are equal on both sides of the front and therefore have a special character. The experiments used by the authors pertain, for example, to the case where the second provision is not fulfilled. [Translation of abstract] V. S. Sinel'shchikov

SUB CODE: 20

Card 2/2

VALENTINOV, A., podpolkovnik

Determination of geodetic data for long-range firing. Voenn.
vest. 41 no.11:79-83 N '61. (MIRA 16:11)

KUKUYEV, Ye.M.; YEFIMOV, V.F.; FLIORIN, B.S., otv.red.; VALENTINOV,
A.M., red.; ABRAMYAN, A.A., red.; KISELEV, N.A., red.; METLIN,
V.A., red.; ANDREYEV, G., tekhn.red.

[Handbook with nomenclature and prices for materials and equipment
used in the coal industry] Nomenklaturnyi spravochnik i tseny na
materialy i oborudovanie, primenyaemye v ugol'noi promyshlennosti.
Moskva. Group 2. [Nonferrous metals] TSvetnye metally. 1950.
275 p. (MIRA 13:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.
(Nonferrous metals)
(Coal mines and mining--Equipment and supplies)

VALENTINOV, A.M.

For firmly establishing measures of economy in all branches of the
coal industry. Ugol' 29 no.1:7-11 Ja '54. (MLRA 7:1)

1. Nachal'nik Finansovogo upravleniya Ministerstva ugol'noy promyshlennosti SSSR.

(Coal mines and mining)

VALENTINOV, B. (Krymskaya oblast')

Improving the system of collecting income tax from collective
farms. Vop. ekon. no.3:154-156 Mr '62. (MIRA 15:3)
(Nizhnegorskiy District--Collective farms--Taxation)

VALENTINOV, B.

We are helping collective farmers to organize their finances.
Fin.SSSR 37 no.4:66-68 Ap '63. (MIRA 16:4)

1. Starshiy inspektor gosudarstvennykh dokhodov Nizhnegorskogo
rayonnogo finansovogo otdela Krymskoy oblasti.
(Nizhnegorskiy District—Collective farms—Finance)

VALENTINOV, G.

Propagandist of aeronautical knowledge. Kryl. rod. 16 no.2:26
F '65. (MIRA 18:3)

VALENTINOV, I.

Africa - Social Conditions

"Stories about Africa." Vokrug Sveta no. 5, '52.

2

9. Monthly List of Russian Accessions, Library of Congress, July 1957. Unclassified.

VALENTINOV, N.

USSR/Radio - Trade Organization

Dec 51

"Concerning the Work of 'Soyuzposyltorg,'"
N. Valentinov

"Radio" No 12, pp 14, 15

Finds the following defects in the work of
"Soyuzposyltorg": poor assortment of receivers
(only the Moskvich and Rodina were available in
1951), delay in filling orders (40-50 days),
high shipping costs (set of batteries for the
Rodina receiver priced at R 101.20 cost 78 rubles
to ship), and poor advertising of available radio
parts.

208T83

1. VALENTINOV, N.
2. USSR (600)
4. Radio, Short-Wave
7. Master radio amateurs, Radio No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

VALENTINOV, N

107-5-22/54

AUTHOR: Valentinov, N.

TITLE: The Victory of Soviet Sportsmen. International Encounters
(Pobeda sovetskikh sportsmenov. Mezhdunarodnyye vstrechi)

PERIODICAL: Radio, 1956, Nr5, pp. 22-23 (USSR)

ABSTRACT: Over 500 duplex radio amateur stations and hundreds of receiving stations took part in the IV International Short-Wave Ham Contest which was organized by the League of Friends of Soldier of the Polish People's Republic. There were hams from Bulgaria, Hungary, East Germany, Poland, Romania, Czechoslovakia, and USSR. The subject of contest: telephone and telegraph duplex radio communication.

The Chief Umpire Board worked in Warsaw and consisted of the following members: A. Yeglinski SP1CM (Poland), K. Nesterov LZ2KAC (Bulgaria), T. Matusek SP6XA (Poland), P. Vasilesku YO6VG (Romania), N. Kazanskiy YA3AΦ (USSR), Kaminek, K. OK1CX (Czechoslovakia), I. Yezerski SP2SJ (Poland).

Soviet hams won the first place in the contest. Among them:
Operator of the Kiyev radioclub Y55KAA, and of the Saratov radioclub YA4K4E; L. Labutin of Moscow YA34P; operator of the Dnepropetrovsk radioclub Y55KAD; Yu. Chernov of Saratov YA445; A. Shchennikov of Pensa YA4Φ4; operator of the Taganrog Radiotechnical Institute YA6KOD;

Card 1/2

VALENTINOV, N.

Forward in force. Radio no.9:7-8 S '56.
(Radio, Shortwave--Competitions)

(MLBA 9:11)

MADZHAROV, D.I.; VALENTINOV, N.

Electrocardiographic changes following anesthesia in children.
Vest. khir. no.10:91-93 '64. (MIRA 19:1)

1. Iz nauchno-issledovatel'skogo instituta vosstanovitel'noy
khirurgii, protezirovaniya i trudoustroystva (dir. - doktor
Iv. Iliyev), Sofiya, Bolgariya.

VALENTINOV, N., inzh.

Lighting will be cheaper. Izobr.i rats. no.4:8-11 Ap '60.
(MIRA 13:6)
(Electric lamps)

VALENTINOV, H., inzh.; NOVINSKIY, G., vrach

An invention should subsist. Izobr.i rats. no.12:16-18 D '60.

(MIRA 13:12)

(Medical instruments and apparatus---Technological innovations)

KYARDI, Ya., brigadir (g.Tallin); KAPRANOV, G. (g.Nal'chik); KNYAZEV, Yu. (g.Nal'chik); SHAPKUN, N., inzh. (g.Krasnodar); KHOKHLOV, Yu. (g.Ural'sk); VALENTIKOV, N., inzh.; NOVINIKY, G., vrach

Innovations. Izobr. i rsts. no.9:12-13 S '61. (MIRA 14:8)

1. Nachal'nik tekhnicheskogo otdela zavoda imeni Zemlyachki, g. Ural'sk (for Khokhlov).

(Technological innovations)

VALENTINOV, N. (Alma-Ata)

Photographic clubs have not yet been organized in Alma-Ata.
Sov. foto 19 no.5:26-27 My '59. (MIRA 12:9)
(Alma-Ata--Photography--Societies, etc.)

VALENTINOV, Oleg

The Fifth Congress of the Trade Unions of Czechoslovakia. Vsem.
prof. dvizh. no.7/8:35-37 JI-Ag '63. (MIRA 16:10)

VALENTINOV, R.; NIKOLAYEV, I.

In primary schools, institutes of higher learning and at practical
training. Sov.foto 22 no.9:42-43 S '62. (MIRA 15:8)
(Photography)

VALENTINOV, R.; IGOREV, N.

Let's talk about your photographs. Sov. foto 23 no.4:42-44
Ap '63. (MIRA 16:5)

(Photographs)

VALENTINOV, V.

Metal workers strike. Sov.profsoiuzy 5 no.3:87-88 Nr '57.
(MLRA 10:4)

(Schleswig--Holstein--Strikes and lockouts--Metal workers)

VALENTINOV, V.

It does not suit anybody. Izobr.i rats. no.9:46-47 S '60.

(MIRA 13:10)

(Technological innovations)

VALENTINOV, V.

Callisthenics in industry. Okhr. truda i sots. strakh. 4
no. 2:50-51 P '61. (MIRA 14:2)
(Callisthenics)

30900. VALENTINOV, Ye.

Vospitaniye meditsinskoy sestry. (Shkola pri bol'nitse im. Ostroumova).
Med. sestra, 1949, No. 9, s. 30-32.

VALENTINOV, Ye.(g. Kuybyshev)

Here they repair motor vehicles. Prom.koop. 12 no.11:15
N '58. (MIRA 11:11)

(Kuybyshev-Automobiles-Maintenance and repair)

SCHWARTZ, E.; VALENTINOVA, I.; SIMKOVA, V.; DORNETZHUBER, V.

Determination of the biological effect of gibberellic acid
in guinea pigs with some biochemical methods. Bratisl. lek.
listy 44, no. 10: 621-627 30 N '64

1. Krajska nemocnica tuberkulózy a chorob pľúcnych. (riaditeľ
MUDr. K. Virsik), a Ústav tuberkulózy v Bratislave (riaditeľ
MUDr. J. Markovíc).

VENTA, Rudolf, Ing.; VALENTINOVA, Ingrid, prom. biochemik.

Spraying of sugar beets with scatox 20. Pracovní lek. 9 no.2:144-146
Apr 57.

1. Ústav hygieny práce a chorob z povolání v Bratislavě, ředitel
MUDr I. Klucík.

(PARATHION,

spraying of sugar beets (Cz))

VALENTINOVA, I.

JANOK, J., RNDr. Prom biochem.; MAJEROVA, Zd., Prom biochem.; VALENTINOVA, I., Ing.;
MASEK, J., Ing.; TICHY, V., Ing.

In vitro anticholinesterase effect of coumarin dialkylphosphoric &
dialkylthiophosphoric acid esters. Pracovni lek. 9 no.6:506-512 Dec 57.

1. Ustav hygieny prace z chorob z povolani v Bratislave, prednosta MUDr.
I. Klucik Vyskumny ustav agrochemickej technologie v Bratislave. J. J.
Bratislava, Ustav hygieny prace.

(COUMARIN, eff.

dialkylphosphoric & dialkylthiophosphoric acid esters, in
vitro anticholinesterase ff. (Cz))

(CHOLINESTERASE, antag.

coumarin dialkylphosphoric & dialkylthiophosphoric acid esters
in vitro (Cz))

CZECHOSLOVAKIA/Chemical Technology - Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

Author : Tikhii, Rattay, Yanok, Valentinova

Inst : -

Title : Mixed Esters of Pyrocatechine, Phosphoric and Thiophosphoric Acid Derivatives.

Orig Pub : Chem. zvesti, 1957, 11, No 7, 398-410

Abstract : From the reaction of 1,2-phenylene chlorothiophosphate with sodium alcoholates, the following compounds of the general formula, $1,2-C_6H_4(O)_2P(S)OR$, were synthesized

(given are: R, yield of the crude material in %, m. p.

in °C., n_D^{20} , d_4^{20}) : C_6H_5 , 90.7, 71-71.5; -, -;

$C_6H_4NO_2-p$, 97.3, 88, -, -; $C_6H_4NO_2-o$, 97.6, 141.5-142,

Card 1/3

CZECHOSLOVAKIA/Chemical Technology - Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

-, -; C_6H_4Cl-O , 99.3, 125.5, -, -; $C_6H_4OCH_3-O(1)$, 73.6,
86.5-87.5, -, -; $C_6H_3Cl_2-2',4'$, 92.0, 80.0, -, -;
4'-methyl coumarinyl-7' (II), 92.8, 146, -, -; C_2H_5 ,
70.4, -, 1.5622, 1.2954; $P(S)(OC_3H_7-n)_2$ (III), 87.8,
-, 1.5311, 1.2514.
Treating 1,2- $C_6H_4(ONa)_2$ with $(C_2H_5O)_2PSCl$, a 94.9%
yield of 1,2-phenylene-bis-(o,o-diethyl) thiophosphate
(IV) was obtained, b. p. 110°C./0.1 mm., $n_D^{20} = 1.5110$,
 $d_4^{20} = 1.2610$. In the reaction of pyrocatechin with

Card 2/3

28

CZECHOSLOVAKIA/Chemical Technology - Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

dialkyl chlorophosphate in the presence of sodium carbonate, 1,2-phenylene-bis(dialkyl)-phosphates are formed (given are: alkyl, yield in %, b. p.

in °C./mm., n_D^{20} , d_4^{20}) : C_2H_5 , 36.0, 112-116/0.08, 1.4679,

1.2110 $n-C_3H_7(V)$, 28.6; 114-118/0.035 (decomposes);

1.4815, 1.1709 $iso-C_3H_7$, 41.2, 112-116/0.05, 1.4715,

1.1581.

The most active insecticides for *Musca Domestica* are compounds III-V. The I_{50} for cholinesterase in the plasma (CP) and the erythrocytes (E) of human blood was determined. CP was the most sensitive to the esters obtained, and only II is active upon CP and E. I has a selective action upon CP.

Card 3/3

VALENTINOVA, I. (Prom. biochem.); JANOK, J., RNDr.

Anticholinesterase activity in vitro of certain O, O-dialkyl-S-(N, N-dialkylthiocarbamyl)-dithiophosphates. Pracovní lek. 10 no.1:16-17
Mar 58.

1. Ústav hygieny práce a chorob z povolání v Bratislavě, přednosta
MUDr I. Klucík.

(PHOSPHATES, effects,

O, O-dialkyl-S-(N, N-dialkylthiocarbamyl)-dithiophosphate,
cholinesterase inhib. in vitro (Cz))

(CHOLINESTERASE, antagonists,

O, O-dialkyl-S-(N,N-dialkylthiocarbamyl)-dithiophosphate,
in vitro (Cz))

SMIDOVA, V.; VALENTINOVA, N.; SMIDA, J.; MEDZIHRADSKY, J.

Neoplastic transformation of rat embryo fibroblasts by fowl
sarcoma virus B77. Neoplasma (Bratisl.) 12 no.4:453-458 '65.

1. Oncological Research Institute, Bratislava, Czechoslovakia.
Submitted April 28, 1965.

VALENTINOVICH, A.A.

Excretion of neutral 17-ketosteroids and chlorides during septic diseases of infants in the first months of life. Vop. okh. nat. i det. 5 no.6:39-44 N-D '60. (MIRA 13:12)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - deystvitel'nyy ohlen AMN SSSR, zasluzhennyy deyatel' nauki, prof.M.S.Maslov) Leningradskogo meditsinskogo pediatricheskogo instituta (direktor - prof.N.I.Shutova).
(INFECTION) (STERIODS) (CHLORIDES IN THE BODY)

VALENTINOVICH, A.A.

Dynamics of 17-ketosteroid excretion in kidney diseases in
children. *Pediatrics* 38 no.2:13-18 F '60. (MIRA 13:12)
(STEROIDS) / (KIDNEYS—DISEASES)

VALENTINOVICH, A.A., dotsent

Renal osteopathies. *Pediatrics* 38 no.9:42-50 S '60. (MIRA 13:12)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - deystvitel'nyy
chlen AMN SSSR prof. M.S. Maslov) Leningradskogo pediatrichesko-
go meditsinskogo instituta (dir. - prof. N.T. Shurova).
(RICKETS)

BERKOVICH, I.M., doktor med. nauk [deceased]; VOLOTOV, A.N., dots.; VALENTINOVICH, A.A., dots.; DOMBROVSKAYA, Yu.F., prof.; KOSSYURA, M.B., kand. med.nauk; KIPER, Ye.L., kand. med. nauk; MASLOV, M.S., prof.[deceased]; POD"YAPOL'SKAYA, V.N., prof.; SEMENOVA, N.Ye., zasl. vrach RSFSR; KHOKHOL, Ye.N., prof.; ZHUKOVSKIY, M.A., red.; KOROLEV, A.V., tekhn. red.

[Multivolume manual on pediatrics] Mnogotomnoe rukovodstvo po pediatrii. Moskva, Medgiz. Vol.4. [Diseases of the digestive tract. Diseases of the liver and skin. Vitamins and vitamin deficiency diseases] Zabolevaniia pishchevartel'nogo trakta. Bolezni pochek i kozhi. Vitaminy i bolezni vitaminnoi nedostatochnosti. Red. toma E.N.Khokhol. 1963. 721 p. (MIRA 17:2)

1. Deystvitel'nyy chlen AMN SSSR (for Dombrovskaya, Maslov).
2. Chlen-korrespondent AMN SSSR (for Pod"yapol'skaya, Khokhol).

TUR, A.F., prof., red.; VALENTINOVICH, A.A., red.; VOLOTOV, A.N., red.;
GONCHAROV, P.P., red.; KLIORIN, A.I., red.; SHUTOVA, N.T., red.;
LIBOV, A.L., red.; KHARASH, G.A., tekhn. red.

[Problems of pediatrics] Problemy pediatrii. Leningrad, Medgiz,
1963. 358 p. (MIRA 16:3)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Tur).

(PEDIATRICS)

| 1ST AND 2ND ORDERS | | | | | | | | | | PROCESSES AND PROPERTIES INDEX | | | | | | | | | | 100 AND 4TH ORDERS | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--------------------------------|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|
| <p>5267* Experimental Work Operation of Electric Furnaces With Screen Insulation. (In Russian.) K. A. Valentinovich. <i>Promyshlennaya Energetika</i> (Industrial Power), v. 7, Dec. 1950, p. 6-8.</p> <p>Presents results of experiments in which screen insulation replaces the standard brick structure with refractory lining. The brick walls are replaced by a series of thin screens of metal and ceramic material having air spaces between them. Results indicate that such furnaces heat up many times faster than ordinary furnaces, resulting in about 40% decrease of electric-power consumption and considerable reduction in maintenance costs. Includes diagrams.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASH-STA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>1ST AND 4TH ORDERS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |